

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU03/00731

A. CLASSIFICATION OF SUBJECT MATTER					
Int. Cl. ⁷ : G01N 33/48					
According to International Patent Classification (IPC) or to both national classification and IPC					
B. FIELDS SEARCHED					
Minimum documentation searched (classification system followed by classification symbols)					
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched					
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) WPIDS (World Patents); CAPLUS (Chemical Abstracts); MEDLINE (Medical Abstracts); keywords incl. mucopolysaccharidosis/oses, lysosomal storage, electrospray					
C. DOCUMENTS CONSIDERED TO BE RELEVANT					
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.			
P,X	MOLECULAR GENETICS AND METABOLISM, vol. 78, 193-204; Ramsay, S.L. et al. (2003) Determination of monosaccharides and disaccharides in mucopolysaccharidoses patents by electrospray ionisation spectrometry; published March 2003; see the whole document, but particularly the references.	1-61			
X,Y	CLINICAL CHEMISTRY, vol. 48 no. 1, 131-139; Rozaklis, T. et al. (2002) Determination of oligosaccharides in Pompe disease by electrospray ionization tandem mass spectrometry; published January 2002; see the whole document.	1-61			
Y	ANALYTICAL BIOCHEMISTRY, vol. 248, 63-75; Pitt, J.J. and Gorman, J.J. (1997) Oligosaccharide characterization and quantitation using 1-phenyl-3-methyl-5-pyrazolone derivatization and matrix-assisted laser desorption/ionization time-of-flight mass spectrometry; see the whole document.	1-61			
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> See patent family annex					
<table style="width: 100%; border: none;"> <tr> <td style="width: 33%; vertical-align: top;"> <p>* Special categories of cited documents:</p> <p>"A" Document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" Earlier application or patent but published on or after the international filing date</p> <p>"L" Document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" Document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" Document published prior to the international filing date but later than the priority date claimed</p> </td> <td style="width: 33%; vertical-align: top;"> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&" document member of the same patent family</p> </td> <td style="width: 33%;"></td> </tr> </table>			<p>* Special categories of cited documents:</p> <p>"A" Document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" Earlier application or patent but published on or after the international filing date</p> <p>"L" Document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" Document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" Document published prior to the international filing date but later than the priority date claimed</p>	<p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&" document member of the same patent family</p>	
<p>* Special categories of cited documents:</p> <p>"A" Document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" Earlier application or patent but published on or after the international filing date</p> <p>"L" Document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" Document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" Document published prior to the international filing date but later than the priority date claimed</p>	<p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&" document member of the same patent family</p>				
Date of the actual completion of the international search 14 August 2003		Date of mailing of the international search report 29 AUG 2003			
Name and mailing address of the ISA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustalia.gov.au Facsimile No. (02) 6285 3929		Authorized officer DAVID HENNESSY Telephone No : (02) 6283 2255			

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU03/00731

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,Y	ANALYTICAL BIOCHEMISTRY, vol. 119, 120-127; Hopwood, J.J. and Harrison, J.R. (1982) High resolution electrophoresis of urinary glycosaminoglycans: and improved screening test for the mucopolysaccharidoses; see the whole document.	1-61
X,Y	MOLECULAR GENETICS AND METABOLISM, vol. 65, 282-290; Byers, S. et al. (1998) Glycosaminoglycan accumulation and excretion in the mucopolysaccharidoses: characterization and basis of a diagnostic test for MPS; see the whole document.	1-61
X,Y	BIOCHEM. J., vol. 229, 579-586; Hopwood, J.J. and Elliott, H. (1985) Urinary excretion of sulphated N-acetylhexosamines in patients with various mucopolysaccharidoses; see the whole document.	1-61
Y	JOURNAL OF THE AMERICAN SOCIETY FOR MASS SPECTROMETRY, vol. 11, 916-920; Desaire, H. and Leary, J.A. (2000) Detection of the sulfated disaccharides in chondroitin sulfate by electrospray tandem mass spectrometry; see the whole document.	1-61
Y	CLINICAL CHEMISTRY, vol. 47, no. 11, 1937-1938; Sweetman, L. (2001) Newborn screening by tandem mass spectrometry: gaining experience; see the whole document.	1-61
P,X	RU 2196988 C2 (GOSUDARSTVENNYJ NOVOSIBIRSKIY OBLASTNOJ KLINICHESKIY DIAGNOSTICHESKIY TSENTR) 20 January 2003; see the abstract.	1-3, 5-7, 13, 25, 27-29, 32-33, 39, 52
P,X,Y	WO 03/048784 A2 (ICH PRODUCTIONS LIMITED) 12 June 2003; see the examples, claims and figures in particular.	1-3, 12, 19, 27-29, 38, 42, 49
X,Y	WO 01/94941 A2 (DUKE UNIVERSITY) 13 December 2001; see the examples, claims and figures in particular.	1-61
Y	GLYCOCONJUGATE JOURNAL, vol. 15, 737-747; Packer, N.H. et al. (1998) A general approach to desalting oligosaccharides released from glycoproteins; see the whole document.	1-61
Y	ANALYTICAL CHEMISTRY, vol. 73 no. 8, 1651-1657; Gerber, S.A. et al. (2001) Direct profiling of multiple enzyme activities in human cell lysates by affinity chromatography/electrospray ionization mass spectrometry: application to clinical enzymology. See the abstract in particular.	1-61
Y	THE JOURNAL OF INVESTIGATIVE DERMATOLOGY, vol. 79, 38s-44s; Fluharty, A.L. (1982) The mucopolysaccharidoses: a synergism between clinical and basic investigation. See the tables, figures and abstract in particular.	1-61
Y	ACTA NEUROPATHOL, vol. 100, 409-414; Whitfield, P. et al. (2000) G _{M1} -gangliosidosis in cross-bred dog confirmed by detection of G _{M1} -ganglioside using electrospray ionisation-tandem mass spectrometry; see the abstract and figures.	1-61

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU03/00731

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member			
RU	2196988				
WO	2003048784	GB	200128498		
WO	200194941	AU	200166733	CA	2409989
				US	2002102737
END OF ANNEX					